Koffler Scientific Reserve at Jokers Hill
UNIVERSITY OF TORONTO

User Guide

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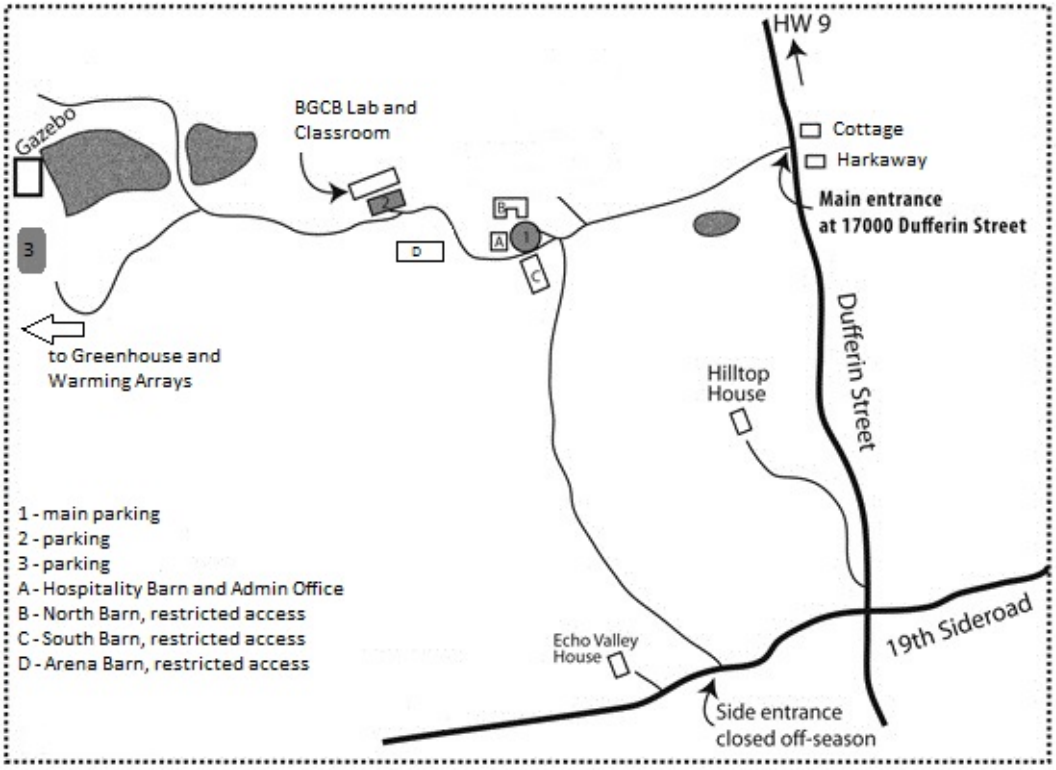
Overview of Buildings at KSR

Map



Summary of Buildings

Offices

- Hospitality Barn

  Offices of: Prof. John Stinchcombe, Director
  Stephan Schneider, Station Manager
  John Jensen, Facilities Manager
  Jenn English, Administrator

Research

- BGCB

  Biodiversity and Global Change Biology lab and classroom
  -located in the west end of the former 'Racing Barn'; houses UofT faculty personal lab, and also includes general lab space for all KSR researchers, a classroom and common eating area; storage is also available in the unrenovated east side of the building

- Green House

  -located on the old tennis courts, just to the west of the Gazebo

Please arrange use of research facilities with the Director or Station Manager

Visitor Housing

- Harkaway
  Graduate/Undergraduate Student Housing – Shared
  -sleeps seven (7) people; 2 bedrooms, 1 full and 1 half bathrooms, laundry facilities
- Cottage
  Graduate/Undergraduate Student Housing – Shared
  -sleeps seven (7) people; 2 bedrooms, 2 full bathrooms, laundry facilities
- Hilltop
  Graduate/Undergraduate Student Housing – Shared
  -sleeps ten (10) people; 2 bedrooms, 2 full bathrooms, laundry facilities
- Echo Valley
  Graduate/Undergraduate Student Housing – Shared
  -sleeps nine (9) people; 2 bedrooms, 2 full bathrooms
- Wagon Wheels
  Contact the Station Manager for details

Staff Housing

- Gate House
  Private residence of John Jensen, Facilities Manager
- Willow Ridge
  Private residence of Stephan Schneider, Station Manager

Please go to staff houses only if invited, thank-you

Barns

- Hospitality Barn
  -main administrative office
- North Barn
  -former horse stalls serve as storage for garbage, recycling, firewood, etc.
- South Barn
  Employees only, off limits to researchers
- Arena Barn
  Employees only, off limits to researchers

Other Buildings

- Gazebo
  -open to researchers as a meeting space or lounge area
  -public bathrooms are nearby

Visitor and Trespasser Policies

Visitor Policy

Although the Koffler Scientific Reserve (KSR) is a vast property with many different resources, the property does have limitations and relies on the goodwill and cooperation of researchers and visitors to fulfill the KSR mission. Researchers, staff and visitors from the public are all equally expected to respect the research, education and outreach purposes of the reserve by treating others and the property itself with respect. In particular, it is important for researchers to show willingness to compromise, cooperate and share resources with other researchers so that we can provide the best possible research and teaching environment for everyone.

Public visitors are expected to have the utmost care and respect for the research and conservation status of the property by remaining on marked trails and leaving all parts of the property undisturbed; particularly flagging of any kind, vegetation and animals.

As a University of Toronto property, priority will be given to UofT research and education activities whenever possible. However, all approved visitors are welcome and KSR will make every effort to accommodate the needs of all mission-related activities on the property.

Property of visitors that is brought to the reserve is the responsibility of the visitor. The University of Toronto and Jokers Hill Estates are not liable and will not be held responsible for any personal property and belongings.

Trespassing Protocols

Trespassing is an ongoing issue at KSR, and researchers are likely to encounter trespassers. Public visitors, including dogs on leash, are allowed on the east end of the property on the established public hiking trails. The public hiking trails are accessible via Bathurst Street and the Thornton Bales Conservation Area (19th Sideroad). Trails are not to be accessed via Dufferin Street.

Members of the public are not permitted on the property to the west of Dufferin Street without an appointment or invitation to an event being hosted. While some unauthorized visitors may have simply mistaken the west side of the property for a public park or conservation area, many are aware that they are trespassing.
If you suspect someone is trespassing, and are confident they are not a threat to your personal safety, please approach them and ask about the research they are conducting and very politely advise that the property is private but that the hiking trails located on the eastside off Bathurst Street are open for public use. If unauthorized individual(s) resist leaving, walk away and contact the Station Manager immediately.

In the event that a possible trespasser seems threatening in any way, do not approach them, walk away and contact the Station Manager immediately.

Local Police Contact

A small group of York Regional Police Constables are familiar with the KSR property and may be seen patrolling the property. Constable Wade Nethercott and Constable Diane Smart will preferentially take calls concerning incidents and respond if they are on duty. Please call *YORK or 1-866-876-5423 for non-emergency calls.

If you call the police, fire department or medical emergency services immediately contact the Station Manager or Facilities Manager thereafter.

Vehicles and Roads

KSR is served by a network of gravel roads that leads past the BGCB to the gazebo parking lot and across the dam to the racetrack. A network of packed-grass field roads extend outward to most of the reserve, however these are vulnerable to damage from heavy use, particularly in wet weather, and should be used sparingly. The field roads are rough, steep in places, and are best suited to a four-wheel drive vehicle with good ground clearance.

In general, walking is encouraged, and vehicles should only access the field roads for the purpose of delivering bulky supplies and equipment. If you must use the field roads, drive very slowly and stay on well-established tracks. **Never cross open fields and unmowed areas!** Hazards including holes, wildlife and even researchers can be easily concealed in long grass. To reduce the risk of fire in extreme dry conditions, be careful to park your vehicle so that the exhaust and muffler do not come in contact with dry grass.

Parking

There are three main parking lots; one by the office and barns area, one by the BGCB, and one gravel lot near the gazebo and heating arrays. Please use the main parking areas whenever possible. If you must park elsewhere, be sure not to block building access or other traffic. Do not use the driveways of private residences as a parking area unless invited to do so.

More remote parts of the reserve can be accessed by roadside parking on Dufferin and 19th Sideroad, however main road parking is not recommended due to frequent carelessness of other drivers using these roads.

Spring Thaw and Winter Road Closures

During extended periods of bad weather, particularly the spring thaw, all of the unpaved roads on the reserve can become soft, easily damaged and impassible. At these times KSR staff will place a barrier across the roadway indicating that vehicle access is closed. Pay attention to these barriers, and if you must access your site for equipment delivery/retrieval, contact the Station Manager, Stephan Schneider, for assistance.

The main entrance and parking lots at the office and BGCB are cleared of snow and are generally accessible during winter months. The road to the gazebo will be cleared periodically and year-round vehicle access is not guaranteed. Do not attempt to drive outside the plowed areas during snowy and/or icy conditions.

Personal Vehicles

Personal vehicles are allowed on KSR property and are subject to some restrictions. All vehicles must have current registration and insurance, as per Ontario law. Personal vehicles may be used to access research sites but must be approved in advance by the Station Manager, Stephan Schneider, or the Facilities Manager, John Jensen.

If a vehicle becomes immobilized contact either Manager for assistance.

If you will regularly be bringing the same vehicle to the reserve, please advise the Station Manager of the make, license plate, etc. This will allow KSR staff to differentiate between cars belonging to our researchers and those that are likely outside visitors. If you bring a new car or a rental, place a note on the dashboard with your phone number, to indicate to KSR staff whom the vehicle belongs to.

Pet Policy

Pets are welcome at the reserve under strict conditions. Pets must be leashed and under the control of their owner at all times, and are not allowed to wander into areas where research activities may be disrupted.

Pet owners are expected to show consideration for other researchers and visitors at KSR, and to minimize the impact of their pets to the property and prevent impacts to other's personal property. Any pet that may endanger others, whether by aggression or health concerns such as allergies, is not allowed at the reserve.

Owners are responsible for the appropriate removal of pet waste, both indoors and out.

By bringing a pet onto the reserve, owners take fully responsibility and assume full liability for any injury or damage to KSR staff or property, or to others or their property.

An additional fee will be applied for repair or replacement of KSR property, and will be determined on a case by case basis.

In the event of complaints regarding a pet the owner will be notified and required to remove their pet from the property.

Pet owners are responsible for their pet at all times while anywhere on the property, public and private.

Pets are welcome to stay in the residential houses under certain conditions and with the full agreement of *all* house mates. Pets are not to be left alone inside residential houses and buildings.

Health & Safety

Legislation and Responsibility

The *Ontario Occupational Health & Safety Act* provides us with the legal framework and the tools to achieve the goal of making Ontario's workplaces safe and healthy. It sets out the rights and duties of all parties in the workplace. It establishes procedures for dealing with workplace hazards and it provides for enforcement of the law where compliance has not been achieved voluntarily by workplace parties.

For the purposes of this *Act*, all UofT employees are considered workers; including faculty members, research, administrative and other support staff, visiting faculty, and students where they have been paid to perform work or supply services. The *Act* also defines a supervisor as anyone in charge of a workplace or with authority over a work. Thus, faculty members or principle investigators who oversee a research project are also considered to be supervisors.

All workers have legal obligations under the *Act* to ensure that all work is conducted in a safe manner. The purpose of the *Act* is to protect workers from health and safety hazards in the workplace, and to establish procedures for dealing with hazards in the workplace.

The employer must take every reasonable precaution to protect workers; and workers are forbidden from disobeying safety regulations and from knowingly working in an unsafe manner. Fines and/or jail sentences may be, and have been, issued for violations of the *Occupational Health & Safety Act*.

Safety Training

All Primary Investigators (PIs) of research conducted at KSR are responsible for the safety training of their research team members, and all researchers are expected to have the first-aid and lab training typical of life science laboratories at Canadian universities; including but not limited to WHMIS.

It is highly recommended that all individuals conducting research on the reserve obtain the Wilderness & Remote First Aid certification.

Personal Safety & Property

All visitors to KSR, regardless of status, are responsible for their personal safety and are expected to conduct themselves in a safe and reasonable manner.

All visitors are responsible for all personal belongings and property. Personal property is not covered by the University's insurance. The University of Toronto and Jokers Hill Estates are not liable for any lost or damaged items.

All researchers and visitors of KSR must fill out an Emergency Contact Form and submit to the Station Manager. This information will be kept confidential and only used in case of emergency by KSR staff.

When working alone in buildings, on weekends, evenings or nights, keep the door(s) closed and locked. Make sure to notify the Station Manager.

Persons staying in residential houses are responsible for securing doors and windows. It is recommended to use only one (1) door whenever possible and leave doors locked when not in use. The University of Toronto and Jokers Hill Estates are not responsibility for any personal property of persons staying at the reserve, and it is the sole responsibility of the individual to obtain the proper insurance for their personal property.

Do not, under any circumstances, give out the codes you have been provided for buildings and houses. If someone asks for a code advise him or her to contact the Station Manager.

Field Safety

While performing field research make sure to,

- dress for weather and terrain conditions
- bring enough drinking water to last
- bring basic first aid supplies
- program local emergency numbers and KSR contacts into your cell phone
- be aware of your surroundings at all times; including predatory and other wild life

When working alone in the field make sure to notify the Station Manager of your location and expected time of return. Also notify the Station Manager if you are required by your research to go into the field during non-daylight hours regardless if you plan for someone to go with you or you plan to go alone.

Lab Safety

Ensure that you have disclosed all materials, especially chemical and biological, in your research application. You are required to keep a 'Materials Safety Data Sheet' (MSDS) in the area the materials are being used.

Due to lack of proper disposal facilities and pick up from KSR, it is at the Director's discretion to allow hazardous materials.

Water Safety

The pond near the gazebo is available for swimming *at your own risk, during daylight hours only*. No lifeguards are provided.

Swimming at night or under the influence of alcohol at any time, are strictly prohibited and are grounds for immediate dismissal from the KSR property.

Fire Safety

In the event of a fire, or when an alarm sounds, evacuate the building. Walk quickly to the nearest exit and alert others to do the same. If necessary, assist others in exiting the building.

Call 9-1-1 immediately and then notify the Station Manager.

Though most houses have indoor fireplaces they are inoperable and *cannot* be used.

All buildings and residential houses contain a portable fire extinguisher. Fire extinguishers can only put out small, contained fires. Extinguishers in buildings and houses may or may not be suitable for dealing with grease or electrical fires.

If you have not been trained in the proper use of portable extinguishers, do not attempt to fight a fire.

Never fight a fire if,

- the fire is large or spreading
- your escape route may be blocked by the spread of fire
- you are not trained in the correct use of the extinguisher or are unsure of the type of fire

Remember your first priority is to evacuate and call 9-1-1

First Aid

First aid kits are available in all buildings that are accessible to researchers and in all residential houses.

Stephan Schneider, Station Manager, is certified by Red Cross in Wilderness and Remote First Aid.

Accident/Incident Protocols and Reporting

In the event of an accident resulting in injury to a person on KSR property, call 9-1-1 immediately if the injury warrants immediate medical attention. Regardless of the severity of the injury contact the Station Manager as soon as possible. All incidents require the completion of the 'Personal Injury Incident Report' and are to be submitted immediately to the Station Manager.

If there is damage to a personal property, including vehicles, while on KSR property please notify the Station Manager, and your insurer where applicable. You will also be required to complete a 'Property Damage Incident Report' and submit to the Station Manager.

Reportable incidents include those which,

- result in personal injury or lost time from work
- have potential to result in personal injury or property damage even though no injury or damage actually occurred

- occur to any person while on the Koffler Scientific Reserve premises; including residential houses and yards
- occur to a student during the course of his or her classroom, lab or field work

Workplace Harassment and Violence

A recent study by Clancy et al. (2014, PloS One 9:e102172) documented the prevalence of sexual harassment, harassment, and in appropriate comments during field work. The results were shocking: 64% of survey respondents had experienced sexual harassment during field work. Both men and women reported harassment, with women often reporting harassment from supervisors and superiors (vertical dynamics), and men often reporting harassment from peers (horizontal dynamics). Moreover, at many field sites and stations, there were no clear reporting mechanisms or procedures for those who were subject to, or witnessed, harassment.

KSR's policies mirror the University of Toronto's: we are committed to a field environment free verbal, physical, and sexual harassment and abuse, and we are committed to using clear reporting mechanisms that make all of our users feel safe and know what recourse they have if they are subject to, or witness, harassment and violence. University members are covered by University policies while engaged in any University-related activity.

The University of Toronto is committed to maintaining a workplace that is free from harassment and violence. Any act of workplace violence is unacceptable conduct that will not be tolerated. No one shall subject any employee to workplace violence or allow or create conditions that support workplace violence.

If you are a victim of, or witness to, a violence or harassment issue please contact one of the following people,

Stephan Schneider, Station Manager *Available 24/7*	647-261-6362 ksr.manager@utoronto.ca
John Stinchcombe, Director *Available 24/7*	647-923-1889 (cell phone #) ksr.info@utoronto.ca
Jenn English, Administrator	416-946-0025 jenn.english@utoronto.ca
Shannon McCauley, UofT Faculty	905-828-5326 shannon.mccauley@utoronto.ca

In addition to the individuals above, all members of the KSR community are encouraged to contact the university's Sexual Harassment Office and/or the Community Safety Office with questions or concerns. The Sexual Harassment Office handles complaints based on sex, sexual orientation, gender identity, and gender expression. The Community Safety Office handles issues of harassment, violence and personal safety. These offices are an invaluable source of information, advice, and guidance and you may contact them on a confidential basis.

Sexual Harassment Officer	416-978-3908 paddy.stamp@utoronto.ca Website: http://www.sho.utoronto.ca
Community Safety Office	416-978-1485 Website: http://www.communitysafety.utoronto.ca

Any employee who subjects another employee to workplace harassment or violence may be subject to disciplinary action up to and including termination of employment. A student will be penalized for such inappropriate conduct under the Code of Student Conduct or the Sexual Harassment Policy. Any company that contracts with the University is required to hold its employees to the obligation not to engage in harassment or violence in the workplace. Where agents or employees of outside contractors subject University of Toronto employees or students to workplace harassment or violence the University will invoke this obligation, and will take immediate steps to safeguard its students and employees.

The Occupational Health and Safety Act defines workplace,

- Harassment as "engaging in a course of vexatious comment or conduct against a worker in a workplace that is known or ought reasonably to be known and unwelcome"
- Violence as
  ① "the exercise of physical force by a person, against a worker, in a workplace, that causes or could cause physical injury to the worker"
  ② "an attempt to exercise physical force against a worker, in a workplace, that could cause physical injury to the worker"
  ③ "a statement or behaviour that it is reasonable for a worker to interpret as a threat to exercise physical force against the worker, in a workplace, that could cause physical injury to the worker"

Lab Research

All Primary Investigators (PIs) of research conducted at KSR are responsible for the safety training of their research team members, and all researchers are expected to have the first-aid and lab training typical of life science laboratories at Canadian universities; including but not limited to WHMIS.
It is highly recommended that all individuals conducting research on the reserve obtain the Wilderness & Remote First Aid certification.

All researchers must complete an Emergency Contact Form and submit to the Station Manager.

Assignment of Lab Space

All lab space is located in the BGCB. The general use lab space consists mostly of the benches located in the front and the back. The Director will assign lab space as part of the research application process. It is vital that researchers have received the appropriate training through the University of Toronto or their home institution before commencing work in a lab.

The field molecular lab is available for usage only upon the approval from the Director. This is due to the specialized, sterile and costly nature of molecular research. *Food and drinks are not allowed in the molecular lab*. This lab remains locked when not in use.

UofT faculty member, Prof. Art Weis, also has a personal lab in the BGCB, located in a separate room and clearly marked. All equipment and supplies in this space are the personal research property of Prof. Weis and his university lab. Please do not use or remove any of the equipment and supplies located in this lab.

Computer Usage

The desktop computer in the general lab is available for all researchers to use. This computer is intended as a short-term (~30 minutes) resource to check email, print datasheets, find maps, etc. and should be used for research purposes as opposed to personal use. The login for guests is posted on the computer. If you are a frequent user of the lab space and prefer a secure login please contact the Station Manager.

For personal use and more lengthy usage please bring your own laptop and login to the wireless internet throughout the lab. Login information is posted on the bulletin boards around the lab.

Video Streaming (youtube, movies, etc)

The internet bandwidth available in the lab is limited. Please refrain from downloading movies, watching streaming videos, extensive Youtube viewing, etc. during peak hours.

Lab Equipment

KSR is pleased to offer researchers an excellent lab research space in a field setting. This space is shared among everyone and the success of the lab depends upon respectful, professional usage.
The dissecting scopes, located in the upstairs classroom, are intended for course work but are also available to researchers if not needed by a course at the time. Researchers should be knowledgeable about using the scope prior to use. Please contact the Director or Station Manager for information and questions.

Drying ovens are available for processing biomass and other research products. There is one large-capacity and one small-capacity oven which are available on a first-come, first-serve basis. Materials must be promptly removed once dry in order to make available for others. Any materials placed in the drying ovens should be labelled with contact information which will be used if a usage conflict arises to figure out an appropriate solution. If no contact information is provided then the researcher is at risk of having their materials removed from the oven.

Usage of the molecular lab equipment is not permitted unless approved by the Director.

Lab Supplies

Researchers are expected to provide all lab supplies required for their research activities at the reserve. KSR does have a small supply of consumables, such as paper and pens, available if items are needed unexpectedly.

Ensure that you have disclosed all materials, especially chemical and biological, in your research application. You are required to keep a 'Materials Safety Data Sheet' (MSDS) in the area the materials are being used.
Due to lack of proper disposal facilities and pick up from KSR, it is at the Director's discretion to allow hazardous materials.

Storage Space

The unrenovated area of the BGCB contains former horse stalls that are available to researchers as personal research equipment storage (one stall per lab). The stalls are accessible from both the lab area and the exterior large sliding doors located at the front of the building, allowing for easy moving of equipment. The stalls are dry but are vulnerable to varying degrees of temperature and humidity, and are not vermin proof. It is recommended that any valuable or delicate equipment not be stored in these stalls. To arrange storage contact the Station Manager.

If larger, more secure, temperature controlled storage is required for equipment or materials that must be kept on site please contact the Station Manager. Such storage may be subject to an additional fee.

Lockers

Individual lockers are available in the back lab space of the BGCB for keeping personal or research items secure. Researchers are required to bring their own lock. KSR does not make assignments for lockers and they are available on a first-come, first-serve basis.

Cleaning and Maintaining the Lab

Researchers are responsible for any messes or clutter related to research, teaching or social activities; this includes plant material, dust, dirt, packaging, etc. Cleaning supplies are located in the closets of the general lab space and kitchen. Please feel free to use these supplies to maintain the lab space as needed. A daily sweeping is recommended.

Garbage and recycling bins are located throughout the BGCB and will be tended to by staff.

Field Research

All Primary Investigators (PIs) of research conducted at KSR are responsible for the safety training of their research team members, and all researchers are expected to have the first-aid and lab training typical of life science laboratories at Canadian universities; including but not limited to WHMIS.
It is highly recommended that all individuals conducting research on the reserve obtain the Wilderness & Remote First Aid certification.

All researchers must complete an Emergency Contact form and submit to the Station Manager.

Policy Governing Field Work

This policy has been developed by the Koffler Scientific Reserve at Jokers Hill Scientific Oversight Committee in order to facilitate research at the Reserve. Observational studies, experimental research, and teaching uses all are encouraged; the intent of this policy is to minimize associated environmental impacts, conflicts among researchers, and conflicts with management practices. Development of this policy is ongoing, and changes and additions may be expected. Updates will be made available on the KSR web page. When in doubt, please refer to the webpage:
http://ksr.utoronto.ca/research/doing-research-at-ksr/

- All new and continuing research and teaching must be approved annually by the Scientific Oversight Committee. Applications must be submitted on the forms provided by April 1 (or 30 days before the proposed start date for work scheduled to begin before March 30). Applications will be accepted, rejected, or requested to be modified on the basis of environmental impacts, conflicts with existing or proposed research, and compatibility with site management. The scientific merit of the proposal will also be weighed in all requests involving long-term projects or substantial environmental impacts. Application forms can be downloaded at:
  http://ksr.utoronto.ca/research/doing-research-at-ksr/

- Applications must include a 200 word general abstract to be posted on the KSR website. Investigators should compose these summaries with the general public in mind. This means, keep away from jargon and indicate the societal benefits of the work, as appropriate.

- If an approved research plan changes significantly (i.e., if there are changes in the potential for impacts on other projects or the environment), it will be necessary to re-confirm approval with the Scientific Oversight Committee.

- Study sites must be selected in consultation with the KSR Director and/or Station Manager. Once study sites are chosen, the Principal Investigator will supply GPS coordinates in the form of a *.kmz file, suitable for uploading to Google Earth.

- All plots must be distinctively marked with flagging indicating the Principle Investigator and the date of installation and date of expected completion. Unmarked or unauthorized materials may be removed by the KSR staff.

- Upon the termination of a project, any equipment, plot markers, etc. must be removed by the researcher within 6 months of the final report. Researchers may be charged for the removal of abandoned materials. Long-term or permanent plots are permitted, but may require special approval.

- On-site housing is available. Please refer to the Housing and Staying at KSR sections (pages 13-16) for more information.

- Logistical support (site preparation, utilities, equipment use) may be available on a limited basis. Researchers anticipating such needs should enquire with the Director and/or Station Manager and coordinate with the Facilities Manager well in advance.

- A report must be completed annually for any work performed in the previous year, including both completed and continuing work. Reports must be submitted on the forms provided by April 1. Summaries may be posted online, unless the researcher requests otherwise. Summaries may be provided less frequently for long-term projects if the Director and/or the Scientific Oversight Committee agree.

- All research and program fess must be paid prior to the publication of any research performed at KSR.

- Publication of work performed at Jokers Hill must acknowledge the station, and two copies of all reprints must be provided to the Scientific Oversight Committee through the Director. A single spiral-bound copy of all theses also must be provided.

- All research must conform both to government regulations and to the safety, ethical and animal use guidelines established by the University of Toronto. See the following for details.

Violation of these guidelines may result in the withdrawal of research permission.

Assignment of Field Sites

Locations and marking of field sites must be established in cooperation with the Director and/or Station Manager as part of the research application and approval process. This is important to prevent overlapping of field sites as well the history of a plot may strongly influence the resulting data; KSR has a long history of diverse land use. Please consult with the Director and/or Station Manager if alteration or expansion to an existing field site is necessary.

Before Going into the Field

Always let someone know where you are going and your expected time of return. It is strongly recommended you enter the KSR Director, Station Manager, and Facilities Manager, and all emergency contact numbers into your cell phone.

When working alone in the field make sure to notify the Station Manager of your location and expected time of return. Also notify the Station Manager if you are required by your research to go into the field during non-daylight hours regardless if you plan for someone to go with you or you plan to go alone.

Transportation to Field Sites

All vehicular access to field sites must be pre-approved by the Station or Facilities Manager. Researchers are allowed personal vehicles (e.g. truck, atv or similar) and there is also a field vehicle available at the reserve; please refer to Field Vehicle section (pages 19-20) for more information.
All vehicles in the field must stay on the mowed paths; take extra caution when taking a vehicle off the paved or graveled roadways.

Field Site Setup and Maintenance

Clearly mark all field plots with wire flags, or other approved structures. Also indicate the project number, name of the PI, name of the researcher attending to the plot, and year in a visible area (e.g. edge nearest a path or road). In general, it is ideal to have four large posts or bamboo stakes that will not be overgrown by the vegetation at the exterior corners of your plot, marked with flagging tape.

In general, researchers are responsible for their own field site maintenance, including site preparation. If the site requires more intensive infrastructure and/or skilled labour (e.g. plowing and tilling, containers/pumps for irrigation) the Facilities Manager, John Jensen, may be able to assist. Contact the Station Manager, Stephan Schneider, for more information and as far in advance as possible. Please see the Fees Schedule (pages 31-32) for associated costs.

Water Delivery

Contact the Station Manager for all water delivery needs; please give at least 2-3 days notice. Please see the Fees Schedule (pages 31-32) for associated costs.

Field Supplies

Researchers are expected to provide all field supplies required for their research activities at the reserve. In the spirit of collaboration, reuse and recycling, KSR does maintain a cache of general-use field supplies at the Biodiversity and Global Change Biology (BGCB) lab. All researchers are welcome to use supplies. KSR also welcomes any contributions researchers are able to add back to the cache. Supplies available may include wooden stakes, rebar, flagging, water-resistant paper, containers, etc. Although KSR makes an effort to have consistent emergency provisions, supplies may turn over unexpectedly. Therefore, researchers should not depend on this supply and help maintain it as much as possible.

Tools and Common Equipment

There are a variety of tools, manual and electric, available for research use. The majority of these tools are kept in a secured area. Please contact the Station or Facilities Manager to access.

Common equipment, such as insect nets, soil corers, shovels and wheelbarrows are located in the unrenovated area of the BGCB, in the tack room.

Please make sure to return all tools and common equipment when finished using them.

Field Vehicle (aka Jokermobile)

KSR owns and operates a 2010 Ford Escape Hybrid used as a field vehicle, and also known as the "Jokermobile".

Research and teaching users, students, and visitors are forbidden from driving any other KSR vehicle (pick-up trucks, tractors, etc) and the John Deere Gator owned by a Ryerson University faculty member, for insurance and safety purposes.

Approval for Use

Researchers needing to use the Jokermobile must be a faculty, staff, or student of UofT and have a valid 'G' class license. A copy of your valid drivers' license must be on file with the Station Manager prior to use. If license status changes (e.g. expiry date) the driver is responsible for promptly informing and updating their information with the Station Manager.

Reserving the Field Vehicle

Once approved, researchers will receive the number code to the vehicle and be given access to an online calendar. Reservations are the responsibility of the driver and must include the names of all persons who will be in the vehicle during use.

As a general rule, the vehicle is on a first-come, first-serve basis, and priority must be given to research, education and outreach related purposes. If a time conflict arises it is expected the researchers will be willing compromise and work out a solution among themselves. If a conflict cannot be resolved please contact the Station Manager.

Usage Protocols

The vehicle can be used on the reserve and off the reserve for errands in the Newmarket area and transport of materials from the St. George, Scarborough and Mississauga campuses. All other trips should be approved by the Station Manager. This vehicle is not for personal use, with the exception of researchers living on the reserve who have been given permission.

All Ontario laws must be obeyed; if a fine, other infringement or toll charge is issued it is the sole responsibility of the driver to pay or otherwise resolve. You may also lose your privilege to drive the vehicle.

The vehicle may be taken off-road on the reserve for research only (not recreational purposes); however this should be considered a last resort option as driving in the field can damage field research and impact the conservation of the property's valuable ecosystems.

Driving and Maintaining the Field Vehicle

Drivers must record the beginning and ending mileage on the tracking sheets provided in the vehicle along with other requested information. The completed tracking sheets are used for billing and other record keeping purposes.
The Station Manager will refuel the vehicle weekly. If fuel is low please contact the Station Manager so he can refuel the vehicle.

Drivers are responsible for the basic cleanliness of the Jokermobile's interior; such as removing trash and cleaning up spills or other minor messes. KSR has the vehicle cleaned more intensively at the end of the field season.

For repairs and maintenance, general and emergency, contact the Station Manager.

Accident Reporting

The Jokermobile and drivers are insured through the University of Toronto by Zurich Insurance Company; owner's and insurance slips are located in the glove box.

In the event of an accident please call 9-1-1 immediately if there are injuries that warrant immediate medical attention, and then contact the Station Manager. If there are minor or no injuries contact the Station Manager immediately.

Regardless how minor or major the accident, a 'Driver's Report of Accident' must be completed for all instances and submitted immediately to the Station Manager.
Forms are available in the administrative office space located in the south side of the Hospitality Barn.

Fees and Invoicing

Usage of the Jokermobile is charged on a per kilometer basis of $0.47/km and billed to the PI of the research for which the vehicle was used to conduct. In the event that there is no PI, the driver will be billed directly.

Mileage is to be recorded on the tracking sheets provided in the vehicle. In the event that a trip is not recorded the online calendar will be consulted for billing purposes. Please make sure to record your mileage to ensure accurate billing.

KSR will not charge for the use of the field vehicle when being used for grocery runs by researchers staying at KSR.

Housing

Available Accommodations

RESIDENCE	DESCRIPTION
Harkaway	Student Housing ♦ sleeps seven (7) people; bunk beds and singles ♦ 2 bedrooms, 1 full and 1 half bathrooms, laundry facilities, fully equipped kitchen
Cottage/Brown House	Student Housing ♦ sleeps seven (7) people; bunk beds and single ♦ 2 bedrooms, 2 full bathrooms, laundry facilities, fully equipped kitchen
Hilltop	Student Housing (including field courses) ♦ sleeps ten (10) people; bunk beds and single ♦ 2 bedrooms, 2 full and 1 half bathrooms, laundry facilities, fully equipped kitchen
Echo Valley	Student Housing (including field courses) ♦ sleeps nine (9) people; bunk beds and single ♦ 2 bedrooms, 2 full bathrooms, fully equipped kitchen
Wagon Wheels	Contact the Station Manager for details

Maximum overnight capacity for all residential houses is 10 people
NO EXCEPTIONS

Arranging Housing

All researchers needing overnight accommodations at KSR need to complete the 2015 Housing Reservation Form and submit to ksr.manager@utoronto.ca.

Please keep in mind that housing is limited during the peak field season, May through September, and may not available for last minute requests.

Be sure to submit your completed Rental Application as far in advance of your arrival as possible.
Researchers will receive a housing information package via email 5-10 business days prior to their scheduled arrival date.

Fees and Invoicing

Unless otherwise arranged, PI's are assumed responsible for the housing cost of their research team and will be invoiced at the end of the field season. During the off season invoices will be sent quarterly.

Housing fees are provided in the Fees Schedule (pages 31-32). If you have any budgetary concerns contact the Director to inquire about special arrangements.
If you have any questions or concerns regarding invoicing contact the Administrator.

Staying at the Koffler Scientific Reserve

The University of Toronto and Jokers Hill Estates (A Division of Ontario 1140011 Ontario Ltd.) is not responsibility for any personal property of researchers staying at the reserve, and it is the sole responsibility of the individual to obtain the proper insurance for their personal property.

Accessing the Houses

Number coded locks are installed on the main doors on all visitor houses. The number code to the house you have been assigned will be included in your housing information package.

It is the responsibility of researchers staying in the houses to secure doors and windows; KSR will not be held responsible for the damage or theft of personal property resulting as neglect of such.
It is recommended to use only one (1) door whenever possible and leave doors locked when not in use.

Linens, Toiletries and Laundry Facilities

Linens, toiletries and laundry supplies (e.g. detergent, softener) are not provided and researchers must bring their own. KSR *does* supply toilet paper.

Food and Pantry Items

Although all shared houses have fully equipped kitchens, food is not provided. All researchers are encouraged to bring their own and cook while staying at the reserve.

Remove all your food and pantry items upon departure.

Cleaning Supplies

Researchers staying overnight are expected to keep the houses in a clean and tidy state and are responsible for coordinating cleaning efforts among house mates.

KSR will provide basic cleaning supplies including broom, mop and bucket, disinfectant, window cleaner, and consumables such as paper towels and sponges.

KSR will <u>not</u> provide cleaning services and it is the sole responsibility of overnight visitor(s) to keep the residence in clean state.

Overnight visitors will be held responsible for any damage to the house or contents due to uncleanliness or defacement. An additional fee may be applied for repair or replacement and will be determined on a case by case basis.

Garbage, Recycling and Green Bin Waste

All houses are equipped with garbage, recycling and green bins; garbage and compostable bags are also provided.

The Facilities Manager will coordinate the weekly pickup of garbage, recycling and green bin waste at the road side. Researchers are expected to pick up the empty bins at the end of the day.

If garbage and/or recycling needs to be disposed of before weekly pick-up empty receptacles, then contact the Facilities Manager.

Regardless of the duration of stay, it is expected that all waste is dealt with appropriately before departing.

Maintaining a Healthy Living Space

The following are tips for maintaining a healthy shared living space,

- Keep surfaces clean of food debris and drink spillage
- Wash, dry and put away dishes in a timely matter
- Keep common areas neat and tidy
- Perform light housekeeping duties, such as sweeping and wiping surfaces with disinfectant, often
- Thoroughly clean bedrooms, bathrooms and kitchen on a weekly basis
- Put your garbage, recycling and compost materials where they belong and contact the Facilities Manager if you need to rearrange an extra pickup
- Clearly label your personal items (including toiletries) to avoid mistaken use by other house mates
- Contact the Station Manager for any concerns regarding health and safety

Phone and Internet

There are no phones or internet connections available in the houses; with the exception of the Cottage which does having an operational phone. Researchers are expected to use personal cell phones. We strongly recommend checking to ensure your cellular provider will give you coverage in the area; Rogers and Bell both provide good coverage, some others (e.g. Wind Mobile) do not.

Internet connections are available in the BGCB lab and the common area of the Hospitality Barn. If you require privacy for personal matters please contact the Station Manager to be accommodated.

Indoor Fireplaces

Though most houses have indoor fireplaces they are inoperable and *cannot* be used. An outdoor fire pit is available; please refer to the Common Areas and Recreation section (page 22).

Alcohol

Alcohol is restricted to residential properties and is strictly prohibited in public areas of the reserve. All must abide by provincial legislation pertaining to alcohol consumption; for example, the legal drinking age is 19. As described in the Safety and First Aid section, swimming after alcohol consumption is strictly forbidden.

If caught in violation of the above KSR has the right to terminate your stay.

Repairs and Maintenance

Please contact the Station Manager for all repairs and maintenance including emergencies.

Pet Policy

Pets are welcome to stay in the residential houses under certain conditions and with the full agreement of *all* house mates. By bringing a pet onto the reserve and in residential houses, owners take full responsibility for any damage to KSR property or to personal property of other researchers.

Pets are not to be left alone inside residential houses and buildings.

In the event of complaints regarding a pet the owner will be notified and required to remove their pet from the property.

Pet owners are responsible for their pet at all times while anywhere on the property, public and private; please see the Visitor and Trespasser Policies section (page 3-4) for more details regarding pets.

Receiving Mail and Packages

All mail should be sent to,

Your Name
Name of Residential House
17000 Dufferin Street
King City, ON
L7B 1K5

Make sure to include the name of the house where you are staying so mail is easily deliverable.

Shipping larger items to KSR is not advised as it is a large property and drivers often get lost.

Vacating the House

Upon leaving the house at the end of your stay make sure to,

- Take all food, beverage, toiletries and other personal items you brought with you
- Notify the Station Manager via email (ksr.manager@utoronto.ca) that you have left if the date is different from what previously confirmed

Recreation and Common Areas

BGCB Kitchen

There is a small kitchen and dining space located in the BGCB and is open to all visitors at KSR. This space is intended for eating and drinking, socializing, and meetings among researchers as well as the KSR staff.

Amenities include one small bar fridge, one large fridge with freezer, coffee maker, kettle, microwave, basic flatware and dining ware, and toaster oven. Coffee, tea, sugar, milk and cream, and individual drinks left in the kitchen without a label are available for everyone to enjoy.

Food stored in the fridges or cabinets should be labelled with your name so items are not mistaken for items that are available to everyone.

The kitchen in the main lab is shared and cleaning is also a shared responsibility. All dishes must be washed as they are used; soap, sponges and a drying rack are provided. Please ensure that this space is kept tidy and clean up when you are done. It is important to maintain a healthy eating and meeting space that is free of pests and insects that are right outside the door.

Hospitality Barn

Located off the main parking area, the hospitality barn was the first building adapted into a classroom in the south side of the building; the north side still houses the Facilities Manager's workshop. The south side houses office space for KSR staff.

Gazebo

This building was designed by the famous architect, Raymond Moriyama, and is located on the lower pond and has a deck leading directly to the pond. The gazebo is available for use April through October as a meeting or socializing space.

There is a small kitchen space that has some basic flatware and dining ware. The water is for washing only.

Anyone using the gazebo is responsible for leaving it clean, tidy, and free of food.

Please note the fire pit in the centre is inoperable.

Swimming

The lower pond is open for swimming to KSR visitors and researchers. Please be advised that swimming is at your own risk, not the liability of the University of Toronto or Jokers Hill Estates.

Swimming after alcohol consumption and night swimming are strictly prohibited.

Fishing

The ponds were historically stocked with bass and are now full of fish. You are welcome to fish but it is not recommended that you keep or eat the fish; and doing so is at your risk. A few abandoned rods are available for communal use.

Overnight Camping

Overnight camping is strictly prohibited on the reserve; including the public trail area. Special exceptions may be made to recognized groups providing wilderness training but *must* have written approval from the Director.

Outdoor Fires

Outdoor fires are restricted to one pit located adjacent to the pond on the lawn next to the road leading to the gazebo. Before starting a fire *you must* notify the Facilities Manager. Fires will not be allowed if there are windy or other conditions that will make it difficult to contain or if the Township of King has issued a ban.

You must have a bucket of water available while the fire is burning and must be sure to *completely extinguish* the fire before leaving the site.

Use only the cut wood supplied next to the oak tree. *Do not* collect wood from the forested areas to burn; wood debris is an important part of natural ecosystems and could easily be the subject of a research project or highly influential in the process studied by a research project so please do not disturb it.

Alcohol

Alcohol is restricted to residential properties and is strictly prohibited in public areas of the reserve.

All must abide by provincial legislation pertaining to alcohol consumption; for example, the legal drinking age is 19. As described in the Health & Safety section, swimming after alcohol consumption is strictly forbidden.

If caught in violation of the above KSR has the right to terminate your stay.

Hiking and Biking

Hiking is one of the most pleasurable activities at the reserve and all visitors are strongly encouraged to walk around and enjoy the natural beauty. All trails on both the east and west sides of the property are available to official visitors and researchers, and exploration is welcome. Please note that attendees of courses should be accompanied by an instructor and are not welcome to explore the reserve at their leisure.

The trails on the east side are open to all the public but are to only be accessed from the Bathurst entrance or from the Thornton Bales Conservation Area on the 19th Sideroad. Dogs are welcome on these trails but must be on a leash. Please refer to the Pet Policy section (page 5) for information regarding dogs on the west side of the property and in residential properties.

Bicycles are welcome on the dirt roads and double-tracks around KSR on the west side of Dufferin. We encourage researchers to use bicycles or walking for reaching field sites on the west side of Dufferin, if possible. Bicycling is not allowed on the public trails on the east side of Dufferin Street.

While exploring the reserve please be aware of flagging and other areas indicated for research…please be respectful and do not disturb areas marked for research.

Field Courses and Group Bookings

Field Courses

The Koffler Scientific is able to accommodate field courses providing overnight accommodations, indoor lab and classroom space, and a vast outdoor classroom.

All meals and beverages can be arranged with a local caterer. For more information please contact the Station Manager.

Please keep in mind that accommodations may be limited during the peak season (mid-April to October) and reservations for field courses should be made as far in advance as possible.

Group Bookings

KSR has indoor meeting spaces that can accommodate small groups for day use. As well, overnight accommodations may be available. Outdoor meeting space may also be arranged. For more information please contact the Station Manager.

Please note that priority is given to groups and individuals conducting research at KSR.

General Contact Information

Building	Phone Number
Administrative Offices	905-727-7460
Cottage	905-713-0171

KSR Director – Professor John Stinchcombe

Phone Number:	UofT Campus Office – 416-946-5986 Cell – 647-923-1889
Email:	ksr.info@utoronto.ca
Contact for…	-all research related activities; including research applications, and setup of field plots and other projects -education and outreach; including course and field trip proposals -nature walks, workshops and UofT Naturalist Course -major infrastructure needs and/or opportunities -donations and development opportunities

Station Manager – Stephan Schneider

Phone Number:	Cell – 647-261-6362
Email:	ksr.manager@utoronto.ca
Contact for…	-housing requests, field course bookings, and event bookings -lab and classroom space requirements, and research equipment storage -scheduling plowing and water delivery -access to electric and other tools for research -reports of disturbances or trespassing on all KSR property; including public trails -health and safety issues -accidents and emergency situations -emergency repairs (only in Facilities Manager absence)

Facilities Manager – John Jensen

Phone Number:	Cell – 905-717-9143
Contact for…	-general and emergency (24 hours) repairs to buildings, houses and property -access to electric and other tools for research

KSR Administrator – Jenn English

Phone Number:	UofT Campus Office – 416-946-0025
Email:	jenn.english@utoronto.ca
Contact for…	-invoices and payments, and general administration

Emergency Contact Information

CALL 9-1-1 IN CASE OF EMERGENCY
CONTACT STATION MANAGER IMMEDIATELY AFTER

York Regional Police

Phone Number: 1-866-8POLICE or 1-866-876-5423; non-emergencies only

Address: 17250 Yonge Street, Newmarket, ON, L3Y 4W5

A small group of York Regional Police Constables are familiar with the KSR property and may be seen patrolling the property. Constable Wade Nethercott and Constable Diane Smart will preferentially take calls concerning incidents and respond if they are on duty.

King Fire Department

Phone Number: 905-833-2800

Address: 2075 King Road, King City, ON, L7B 1A1

Fees Schedule

Fees effective May 1, 2015 and are subject to change; refer to the KSR website (http://ksr.utoronto.ca/research/doing-research-at-ksr/facilities-and-fees/) for up-to-date Fees Schedule

Overnight Accommodations

	Nightly	Weekly	Monthly
Shared Housing			
Harkaway, Hilltop, Cottage, Echo Valley	$14	$65	$250
Private Housing			
Wagon Wheels	$28	$130	$500
Off-Season Lab Retreats			
Housing for up to 3 nights *10 people max. per house*	$100 flat rate *Bring your whole lab group for a writing, hiking, relaxing retreat*		

Meals and linens are not included. Off-season rates may differ. Children under 15 stay free.

Research Fees

Program Fees allow researchers to perform multiple experiments under the same fee, with an area surcharge to account for variability in usage intensity. Waivers or reduced fees may be available; contact the Director for details. An estimate of fees will be provided with project approvals.

	Program	Study	Collection only
Fee	$1300/year UofT; $1550/year non UofT	$600/ study UofT; $700/ study non UofT	Collection fee only
Experiment Limit	None	Director	n/a
Area Surcharge	0-2000 square meters at $0.25/meter/year	n/a	n/a
Collection fee	None	$200 / season	$200/season

One hour of site prep, water delivery, or labor from the Site or Station Manager is included in these rates, as is access to classroom, dry lab, and wet lab space. All wet lab users must be trained and have the Director's approval.

Definitions:

Program: Multiple experiments, studies, pilot projects, collections, and investigations per lab.

Study: Observational study compatible with alternate uses or not requiring maintenance or site preparation. ***Examples:*** Observational vegetation sampling, behavioral observations, remote sensing.

Area: Land area demarcated for use by a single PI. Precludes other uses and restricts access by other users. ***Examples:*** fenced plots, marked zones around cattle tanks, large screen structures to exclude pollinators, plowed fields.

Collection: Sampling of organisms or specimens for further analysis in a PI's home lab. Collection activities must be pre-approved, non-depleting, and avoid conflicting with other uses. ***Examples:*** Collecting nematodes for sequencing, seeds for crossing experiments, aquatic larvae for lab work.

Set-up and Maintenance Fees

Setup, maintenance, mowing, plowing, water delivery, etc. by the Station or Facilities Manager are billed at $45/hour.

Vehicle Usage Fees

2010 Ford Escape Hybrid is available for daily use at $0.47/km.

History of Jokers Hill Estates

In the spring of 1996, scientists and students from the University of Toronto headed north to a new property, Jokers Hill, which had been recently donated by Murray and Marvelle Koffler. There, atop the Oak Ridges Moraine, they found a landscape carpeted with opportunity. The natural and agricultural ecosystems on the site offered tantalizing prospects for studies in biodiversity, ecology, evolution and conservation science. The property's proximity to the campuses meant that students would have ready access to a place where they would not just learn about science, but where they could *do* science. In the years since, the Koffler Scientific Reserve at Jokers Hill has become an internationally recognized facility, with a distinguished record of research, training and public education.

The story of how the Kofflers' beloved horse farm came to be the university's field research station offers a glimpse into the layers of geological, social and economic history buried beneath the hilly terraces and woodlots of the Oak Ridges Moraine.

The Land

Stretching 160 kilometres across the northern fringe of the Greater Toronto Area, the moraine is composed of debris deposited during the retreat of the Laurentide ice sheet about 13,000 years ago. The site of numerous kettle lakes, the Moraine filters and releases groundwater into 65 watersheds, including all of Toronto's major river systems. As the glaciers retreated and the climate warmed, deciduous forest species, including beech and maple, along with cedar and white pine, moved in from their southerly glacial refugia.

The Wendat-Huron people had lived north of the Moraine to avoid conflict with the Iroquois confederacy south of Lake Ontario. They introduced Etienne Brulé, the French explorer dispatched by Samuel de Champlain in 1610, to the "Carrying Place Trail". Later the French built a fort along what would become the primary trade highway into Ontario's interior. During the 19th century, settlers in the rapidly growing colony of Upper Canada cleared much of the Moraine, using the old-growth forests for fuel and building material. By the early 20th century the hills had been extensively logged and quarried. Only a few remnants of old growth remained, mostly in areas too rugged to develop, among them a three-hectare stand on the Kofflers' property.

Horses and Dignitaries

The lands that include Jokers Hill were originally assembled by Colonel RS McLaughlin, founder of the Canadian arm of General Motors. In 1952, he gave the estate to his daughter Billie and her husband, Major General Churchill Mann. The couple managed a thoroughbred racing and breeding operation on the site, and built an extensive trail system. According to legend, Billie Mann's favourite horse, Joker, liked to escape and climb to one of the highest points on the property, a spot with a majestic view of the western Moraine. On one such retrieval journey, she said to her husband, "Church, you must build me a house right here and we will call it 'Joker's Hill'." In 1953, the couple hired the prestigious architectural firm of Mathers & Haldenby to build an estate home on that height of land, where they lived for a dozen years.

After passing through several hands, the property was purchased by the Kofflers' in 1969. Murray had been searching for a country place when realtor Moffat Dunlap told him about Jokers Hill. Dunlap's most famous deal involved the sale of a 200-hectare property along the

upper Don River to business man E.P. Taylor, developer of Don Mills, Canada's first planned subdivision. Its focal point was the York Mills Plaza, site of Koffler's first self-serve 'drugmart'.

For Murray, the prospect of country living evoked a summer from his youth, when he worked on a farm, "pitching manure and milking cows; it was a fantastic experience because I was a city boy." He wanted his own children to be exposed to country living and to the openness and freedom that could be found at a place like Jokers Hill. Early on, the Kofflers retained architect Napier Simpson to redesign the main residence, and landscape architect J Austin Floyd to reconfigure the grounds and ponds.

With the Shoppers Drug Mart retail chain growing rapidly in the 1970s, the Kofflers also relied on Jokers Hill for entertaining a wide circle of friends, international dignitaries and business associates. An avid horseback rider, Murray made the property available for the Continental Championship of North America, a major, international, three-day, equestrian competition supervised by HRH Prince Philip, then President of the Fédération Equestre Internationale. Captain Mark Phillips provided advice on course design and construction.

Among many guests were former Prime Minister Pierre Trudeau and his wife Margaret, whom the Kofflers had come to know well. During one weekend visit for cross-country skiing, Trudeau was pressed into service to flip pancakes, which were being served with maple syrup made right on the property.

Between social events, the Kofflers became increasingly enchanted by the natural beauty of the property. Their routines included family picnics, fishing, hiking, cross-country skiing and horseback riding along the kilometres of trails winding through the property – journeys of discovery that gave them an appreciation for the subtle texture of the land. "One of the most beautiful experiences," Marvelle reflects, "has been watching our five children become totally linked to nature and the splendour of the surroundings."

From Farm to Reserve

Rejecting the idea of ever developing the land, the Kofflers sought to conserve it. To that end, Murray wound up the gravel operation in the northeast corner of the property and restored the 30-hectare quarry with extensive tree planting. The Kofflers thought that they might gift the land to the province one day. "We knew we had something special," says Murray. "Everywhere you looked there was something waiting to be discovered."

At a 1995 dinner party at Jokers Hill, Murray fell into conversation with then UofT president Robert Pritchard. Hearing the story that the Province of Ontario did not have the finances to manage the property as a park, Pritchard suggested the Kofflers give the land to the university. "I stuck out my hand and said, 'Fine, you've got it'." Under the transfer agreement the university formally took possession in 1995 and the Kofflers leased back the main house, which they continued to use until 2006.

Almost immediately, top researchers from the University of Guelph, York University and the Royal Ontario Museum joined UofT faculty and students working at the Koffler Scientific Reserve. One early project focused on the old growth stand, mapping the characteristics of every tree in two one-hectare plots. Other research concentrated on the rehabilitation of the Moraine soils due to the Kofflers' reforestation efforts. Ongoing projects include the investigation of genetic adaptation in invasive species, such as Norway maples and purple loosestrife, and the discovery of new clades of fungi growing in the forest soil.

Professor Ann Zimmerman, an aquatic biologist, was appointed to be the founding director of the Koffler Scientific Reserve at Jokers Hill in 2002. She immediately organized the reserve's first residential field course, Experimental Ecology in Southern Ontario. For two weeks, a

group of twelve undergraduate students with their equipment and six graduate students working at the reserve all piled into Willow Ridge; the four bedroom bungalow where the Kofflers had lived while Napier Simpson was working on the main residence; and Prof. Zimmerman cooked the meals. Many of the students were simply astonished by what they found. "They were amazed that there was something like this so close to the city," says Prof. Zimmerman. "These are real city kids and they said things like, 'I've never walked in a forest for so long'." By the following year, students were housed in apartments above the Racing and North Barns, and a classroom had been carved out of the Hospitality Barn.

The Next Level

With the Kofflers' decision to not renew their lease, and with Prof. Zimmerman's completion of her five-year term as Director, the university saw the time was right to take the Koffler Scientific Reserve to the next level. An international search recruited Professor Arthur Weis from the University of California, as the reserve's first resident Director. Prof. Weis, an evolutionary biologist, had done ground breaking work on how plants adapt genetically to sudden changes in climate. Arriving in 2008, he secured funding from the Canada Foundation for Innovation, the Ontario Research Fund and the university's internal sources to transform the Racing Barn into the reserve's first lab space. Designed by IntraArchitects to echo Jokers Hill equestrian past, the new *Laboratory for Biodiversity and Global Change Biology* offers state-of-the-art facilities. Here scientists from UofT and around the world can develop long-term, in-depth studies that can help to build the foundation of knowledge our society will need to devise a sustainable future

"We didn't realize the land's tremendous potential in terms of its importance for scientific study," Murray once remarked. "We never thought we would get so much pleasure from seeing Jokers Hill evolve the way it has. We're very proud."